

VIRTUAL LOOP CARRIER SYSTEM WITH NETWORK CLOCK RECOVERY

~~ABSTRACT OF THE DISCLOSURE~~

A loop carrier system includes a home local area network having plural
5 telephone modules and a hub coupled to in-home telephone wiring. The telephone
modules and the hub communicate voice signals over the in-home wiring in a dedicated
frequency band above baseband POTS. The hub converts between voice signals and
voice packets and is connected to a network access device for transferring the voice
packets from the home local area network to a telecommunications network which
10 routes the voice packets to a gateway. The gateway converts between the voice packets
and a circuit format compatible with a local digital voice switch. The home local area
network includes a timing recovery mechanism which in the absence of a clock that is
traceable to the Primary Reference Clock on the public network is robust to clock drift,
cell delay variation and cell impairments.